

What is claimed is:

1. A composition comprising a plurality of polynucleotides having the nucleic acid sequences of SEQ ID NOS:1-13 or the complements thereof.

5 2. An isolated polynucleotide comprising a nucleic acid sequence selected from SEQ ID NOS:1-20 or the complement thereof.

3. A composition comprising a polynucleotide of claim 2 and a labeling moiety.

4. A method of using a composition to screen a plurality of molecules to identify at least one ligand which specifically binds a polynucleotide of the composition, the method comprising:

10 a) combining the composition of claim 1 with molecules under conditions to allow specific binding; and

b) detecting specific binding, thereby identifying a ligand which specifically binds the polynucleotide.

15 5. The method of claim 4 wherein the molecules to be screened are selected from DNA molecules, RNA molecules, peptide nucleic acids, mimetics, and proteins.

6. A method of using a polynucleotide to purify a ligand, the method comprising:

20 a) combining the polynucleotide of claim 2 with a sample under conditions to allow specific binding;

b) recovering the bound polynucleotide; and

c) separating the ligand from the bound polynucleotide, thereby obtaining purified ligand.

7. The method of claim 7 wherein the polynucleotide is attached to a substrate.

8. The method of claim 7 wherein the molecules to be screened are selected from DNA molecules, RNA molecules, peptide nucleic acids, mimetics, and proteins.

9. 10. A method for using a composition to detect gene expression in a sample containing nucleic acids, the method comprising:

25 a) hybridizing the composition of claim 1 to the nucleic acids under conditions for formation of one or more hybridization complexes; and

b) detecting hybridization complex formation, wherein complex formation indicates gene expression in the sample.

10. The method of claim 9 wherein the composition is attached to a substrate.

30 11. The method of claim 9, gene expression indicates the presence of cancer.

13. A vector comprising a polynucleotide of claim 2.

14. A host cell comprising the vector of claim 13.

15. A method for using a host cell to produce a protein, the method comprising:

- culturing the host cell of claim 14 under conditions for expression of the protein; and
- recovering the protein from cell culture.

16. A purified protein obtained using the method of claim 15.

17. A composition comprising the protein of claim 16 and a pharmaceutical carrier.

18. A method for using a protein to screen a plurality of molecules to identify at least one ligand which specifically binds the protein, the method comprising:

- combining the protein of claim 16 with the plurality of molecules under conditions to allow specific binding; and
- detecting specific binding, thereby identifying a ligand which specifically binds the protein.

19. The method of claim 18 wherein the plurality of molecules is selected from DNA molecules, RNA molecules, peptide nucleic acids, mimetics, proteins, agonists, antagonists, and antibodies.

20. A method of using a protein to purify a ligand from a sample, the method comprising:

- combining the protein of claim 16 with a sample under conditions to allow specific binding;
- recovering the bound protein; and
- separating the ligand from the bound protein, thereby obtaining purified ligand.